

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,000	12/03/2003	Dong-Hwan Kim	1190860-991350	7158
32605 7590 09/11/2007 MACPHERSON KWOK CHEN & HEID LLP 2033 GATEWAY PLACE			EXAMINER	
			PERVAN, MICHAEL	
	SUITE 400 SAN JOSE, CA 95110		ART UNIT	PAPER NUMBER
			2629	
			MAIL DATE	DELIVERY MODE
			09/11/2007	PAPEŖ

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•						
		Application No.	Applicant(s)			
Office Action Summary		10/728,000	KIM ET AL.			
		Examiner	Art Unit			
		Michael Pervan	2629			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status	,					
1)⊠	Responsive to communication(s) filed on 25 Ju	<u>ine 2007</u> .				
2a)⊠	This action is FINAL . 2b) This action is non-final.					
3)	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposit	ion of Claims					
4)🖂	Claim(s) 1-12 is/are pending in the application.		*			
	4a) Of the above claim(s) is/are withdraw	wn from consideration.				
5)🛛	Claim(s) 1-11 is/are allowed.					
6)⊠	Claim(s) <u>12</u> is/are rejected.					
•	7) Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction and/o	r election requirement.	•			
Applicat	ion Papers					
9)[The specification is objected to by the Examine	r.				
10)⊠	The drawing(s) filed on 16 January 2007 is/are:	a)⊠ accepted or b)⊡ objected	I to by the Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.			
Priority	under 35 U.S.C. § 119					
12) 又	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).			
•	☑ All b) ☐ Some * c) ☐ None of:					
,	1.⊠ Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority document	s have been received in Applicat	ion No			
	3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Stage			
	application from the International Bureau	u (PCT Rule 17.2(a)).				
* ;	See the attached detailed Office action for a list	of the certified copies not receive	∍d.			
Attachmer	nt(s) ce of References Cited (PTO-892)	4) 🔲 Interview Summary	, (PTO-413)			
	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate			
3) 🛛 Info	rmation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date <u>6/8/07</u> .	5) Notice of Informal F 6) Other:	Patent Application			

Application/Control Number: 10/728,000

Art Unit: 2629

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In regards to claim 12, it recites "reversing a state of the inversion signal after applying the image data to the odd pixels" and "reversing a state of the common voltage after supplying the common voltage to the odd and even pixels". However as can be seen in Figures 4 and 6, the reversing of the state of the inversion signal occurs after supplying a row of odd pixels and the reversing of the state of the common voltage occurs after supplying a row of odd and even pixels.

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 12, it recites "reversing a state of the inversion signal after applying the image data to the odd pixels" and "reversing a state of the common voltage

Application/Control Number: 10/728,000 Page 3

Art Unit: 2629

after supplying the common voltage to the odd and even pixels". However as can be seen in Figures 4 and 6, the reversing of the state of the inversion signal occurs after supplying a row of odd pixels and the reversing of the state of the common voltage occurs after supplying a row of odd and even pixels. Therefore, it is unclear whether or not the reversing of the state of the inversion signal occurs after supplying a row of odd pixels or all odd pixels. Also, it is unclear whether or not the reversing of the state of the common voltage occurs after supplying a row of odd and even pixels or all odd and even pixels.

Allowable Subject Matter

5. Claims 1-11 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Examiner was unable to find a reference or combination of references the teach the limitation of "... the signal controller changes a state of the inversion signal between an end of the transmission of the first image data and a start of the transmission of the second image data and the polarity of the common voltage between an end of the application of the data voltages for a row and a start of the application of the data voltages for a next row".

Response to Arguments

6. Applicant's arguments with respect to claim 12 have been considered but are most in view of the new ground(s) of rejection.

Application/Control Number: 10/728,000 Page 4

Art Unit: 2629

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pervan whose telephone number is (571) 272-0910. The examiner can normally be reached on Monday - Friday between 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/728,000 Page 5

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVP Aug. 30, 2007

SUPERVISORY PATENT EXAMINER